

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002
TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt
Output Set: N:\CRF3\01142002\J009332.raw

ENTERED

3 <110> APPLICANT: Yamamotochi Pharmaceutical Co., Ltd.
4 Kazusa DNA Research Institute
6 <120> TITLE OF INVENTION: NOVEL METALLOPROTEASE HAVING AGGRECANASE ACTIVITY
8 <130> FILE REFERENCE: Q67541
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/009,332
C--> 10 <141> CURRENT FILING DATE: 2001-12-10
10 <150> PRIOR APPLICATION NUMBER: JPA Hei 11-321740
11 <151> PRIOR FILING DATE: 1999-11-11
13 <150> PRIOR APPLICATION NUMBER: JPA 2000-144020
14 <151> PRIOR FILING DATE: 2000-05-16
16 <160> NUMBER OF SEQ ID NOS: 35
18 <170> SOFTWARE: PatentIn version 3.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 950
22 <212> TYPE: PRT
23 <213> ORGANISM: Homo sapiens
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28 1 5 10 15
31 Gly Gly Phe Glu Pro Glu Arg Gly Val Val Val Pro Ile Arg Leu Asp
32 20 25 30
35 Pro Asp Ile Asn Gly Arg Arg Tyr Tyr Trp Arg Gly Pro Glu Asp Ser
36 35 40 45
39 Gly Asp Gln Gly Leu Ile Phe Gln Ile Thr Ala Phe Gln Glu Asp Phe
40 50 55 60
43 Tyr Leu His Leu Thr Pro Asp Ala Gln Phe Leu Ala Pro Ala Phe Ser
44 65 70 75 80
47 Thr Glu His Leu Gly Val Pro Leu Gln Gly Leu Thr Gly Gly Ser Ser
48 85 90 95
51 Asp Leu Arg Arg Cys Phe Tyr Ser Gly Asp Val Asn Ala Glu Pro Asp
52 100 105 110
55 Ser Phe Ala Ala Val Ser Leu Cys Gly Gly Leu Arg Gly Ala Phe Gly
56 115 120 125
59 Tyr Arg Gly Ala Glu Tyr Val Ile Ser Pro Leu Pro Asn Ala Ser Ala
60 130 135 140
63 Pro Ala Ala Gln Arg Asn Ser Gln Gly Ala His Leu Leu Gln Arg Arg
64 145 150 155 160
67 Gly Val Pro Gly Gly Pro Ser Gly Asp Pro Thr Ser Arg Cys Gly Val
68 165 170 175
71 Ala Ser Gly Trp Asn Pro Ala Ile Leu Arg Ala Leu Asp Pro Tyr Lys
72 180 185 190
75 Pro Arg Arg Ala Gly Phe Gly Glu Ser Arg Ser Arg Arg Arg Ser Gly
76 195 200 205
79 Arg Ala Lys Arg Phe Val Ser Ile Pro Arg Tyr Val Glu Thr Leu Val
80 210 215 220
83 Val Ala Asp Glu Ser Met Val Lys Phe His Gly Ala Asp Leu Glu His
84 225 230 235 240

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87 Tyr Leu Leu Thr Leu Leu Ala Thr Ala Ala Arg Leu Tyr Arg His Pro
88 245 250 255
91 Ser Ile Leu Asn Pro Ile Asn Ile Val Val Val Lys Val Leu Leu
92 260 265 270
95 Arg Asp Arg Asp Ser Gly Pro Lys Val Thr Gly Asn Ala Ala Leu Thr
96 275 280 285
99 Leu Arg Asn Phe Cys Ala Trp Gln Lys Lys Leu Asn Lys Val Ser Asp
100 290 295 300
103 Lys His Pro Glu Tyr Trp Asp Thr Ala Ile Leu Phe Thr Arg Gln Asp
104 305 310 315 320
107 Leu Cys Gly Ala Thr Thr Cys Asp Thr Leu Gly Met Ala Asp Val Gly
108 325 330 335
111 Thr Met Cys Asp Pro Lys Arg Ser Cys Ser Val Ile Glu Asp Asp Gly
112 340 345 350
115 Leu Pro Ser Ala Phe Thr Thr Ala His Glu Leu Gly His Val Phe Asn
116 355 360 365
119 Met Pro His Asp Asn Val Lys Val Cys Glu Glu Val Phe Gly Lys Leu
120 370 375 380
123 Arg Ala Asn His Met Met Ser Pro Thr Leu Ile Gln Ile Asp Arg Ala
124 385 390 395 400
127 Asn Pro Trp Ser Ala Cys Ser Ala Ala Ile Ile Thr Asp Phe Leu Asp
128 405 410 415
131 Ser Gly His Gly Asp Cys Leu Leu Asp Gln Pro Ser Lys Pro Ile Ser
132 420 425 430
135 Leu Pro Glu Asp Leu Pro Gly Ala Ser Tyr Thr Leu Ser Gln Gln Cys
136 435 440 445
139 Glu Leu Ala Phe Gly Val Gly Ser Lys Pro Cys Pro Tyr Met Gln Tyr
140 450 455 460
143 Cys Thr Lys Leu Trp Cys Thr Gly Lys Ala Lys Gly Gln Met Val Cys
144 465 470 475 480
147 Gln Thr Arg His Phe Pro Trp Ala Asp Gly Thr Ser Cys Gly Glu Gly
148 485 490 495
151 Lys Leu Cys Leu Lys Gly Ala Cys Val Glu Arg His Asn Leu Asn Lys
152 500 505 510
155 His Arg Val Asp Gly Ser Trp Ala Lys Trp Asp Pro Tyr Gly Pro Cys
156 515 520 525
159 Ser Arg Thr Cys Gly Gly Val Gln Leu Ala Arg Arg Gln Cys Thr
160 530 535 540
163 Asn Pro Thr Pro Ala Asn Gly Gly Lys Tyr Cys Glu Gly Val Arg Val
164 545 550 555 560
167 Lys Tyr Arg Ser Cys Asn Leu Glu Pro Cys Pro Ser Ser Ala Ser Gly
168 565 570 575
171 Lys Ser Phe Arg Glu Glu Gln Cys Glu Ala Phe Asn Gly Tyr Asn His
172 580 585 590
175 Ser Thr Asn Arg Leu Thr Leu Ala Val Ala Trp Val Pro Lys Tyr Ser
176 595 600 605
179 Gly Val Ser Pro Arg Asp Lys Cys Lys Leu Ile Cys Arg Ala Asn Gly
180 610 615 620
183 Thr Gly Tyr Phe Tyr Val Leu Ala Pro Lys Val Val Asp Gly Thr Leu

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184	625	630	635	640
187	Cys Ser Pro Asp Ser Thr Ser Val Cys Val Gln Gly Lys Cys Ile Lys			
188	645	650	655	
191	Ala Gly Cys Asp Gly Asn Leu Gly Ser Lys Lys Arg Phe Asp Lys Cys			
192	660	665	670	
195	Gly Val Cys Gly Gly Asp Asn Lys Ser Cys Lys Lys Val Thr Gly Leu			
196	675	680	685	
199	Phe Thr Lys Pro Met His Gly Tyr Asn Phe Val Val Ala Ile Pro Ala			
200	690	695	700	
203	Gly Ala Ser Ser Ile Asp Ile Arg Gln Arg Gly Tyr Lys Gly Leu Ile			
204	705	710	715	720
207	Gly Asp Asp Asn Tyr Leu Ala Leu Lys Asn Ser Gln Gly Lys Tyr Leu			
208	725	730	735	
211	Leu Asn Gly His Phe Val Val Ser Ala Val Glu Arg Asp Leu Val Val			
212	740	745	750	
215	Lys Gly Ser Leu Leu Arg Tyr Ser Gly Thr Gly Thr Ala Val Glu Ser			
216	755	760	765	
219	Leu Gln Ala Ser Arg Pro Ile Leu Glu Pro Leu Thr Val Glu Val Leu			
220	770	775	780	
223	Ser Val Gly Lys Met Thr Pro Pro Arg Val Arg Tyr Ser Phe Tyr Leu			
224	785	790	795	800
227	Pro Lys Glu Pro Arg Glu Asp Lys Ser Ser His Pro Lys Asp Pro Arg			
228	805	810	815	
231	Gly Pro Ser Val Leu His Asn Ser Val Leu Ser Leu Ser Asn Gln Val			
232	820	825	830	
235	Glu Gln Pro Asp Asp Arg Pro Pro Ala Arg Trp Val Ala Gly Ser Trp			
236	835	840	845	
239	Gly Pro Cys Ser Ala Ser Cys Gly Ser Gly Leu Gln Lys Arg Ala Val			
240	850	855	860	
243	Asp Cys Arg Gly Ser Ala Gly Gln Arg Thr Val Pro Ala Cys Asp Ala			
244	865	870	875	880
247	Ala His Arg Pro Val Glu Thr Gln Ala Cys Gly Glu Pro Cys Pro Thr			
248	885	890	895	
251	Trp Glu Leu Ser Ala Trp Ser Pro Cys Ser Lys Ser Cys Gly Arg Gly			
252	900	905	910	
255	Phe Gln Arg Arg Ser Leu Lys Cys Val Gly His Gly Gly Arg Leu Leu			
256	915	920	925	
259	Ala Arg Asp Gln Cys Asn Leu His Arg Lys Pro Gln Glu Leu Asp Phe			
260	930	935	940	
263	Cys Val Leu Arg Pro Cys			
264	945	950		
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268	<211> LENGTH: 2853			
269	<212> TYPE: DNA			
270	<213> ORGANISM: Homo sapiens			
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275	ccagagcggg aggtatgcgt tcccatccgta ctggaccggc acatataacgg cggccgcgtac		120	
277	tactggcggg gtcccgagga ctcccgggat caggactca ttttcagat cacagcatt		180	

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279	caggaggact	tttacctaca	cctgacgccc	gatgctcagt	tcttggctcc	cgcccttc	240
281	actgagcata	tgggcgctcc	cctccagggg	ctcacccggg	gctcttcaga	cttgcgacgc	300
283	tgcttctatt	ctggggacgt	gaacccggag	ccggactcgt	tcgtctgt	gagccctgtc	360
285	ggggggctcc	ggggagccctt	ttggtacccg	ggccggcgggt	atgtcattag	cccgctgccc	420
287	aatctagcgc	cgccggccgc	gcacgcacac	agccaggccc	cacaccttct	ccagcgcggg	480
289	gggttccgg	cggggccctt	cgaggacccc	acacttcgtcgt	gcgggggtggc	ctcgggctgg	540
291	aacccgcgc	tccctacgggc	cttggggccct	tacaacccgc	ggccgggggg	cttcggggag	600
293	atgcgttagcc	ggcgccggtc	ttggcgccgc	aacgcgttgc	tgtctatccc	cgccgtacgt	660
295	gagacgttgg	ttgttcgcgc	cgagtcataat	gtcaatgtcc	acgcgcggga	cttggaaacat	720
297	tatctgtca	cgtctgtcc	aaacgcgcgc	cgaacttacc	gcatcccaag	catcttcac	780
299	cccatcaaca	tcgttgtgtt	caagggtcgt	cttcttagat	atcgtaactc	cgggcccaag	840
301	gtcaccgcgc	atcaaggatc	gacgcgtcgc	aacttcgttgc	cttgcggagaa	gaagctgaac	900
303	aaatgtatgc	aaacggacccc	cgatgttgc	gacactccca	tcttccttcac	caggcaggac	960
305	ctgtgtggag	ccacccatctt	tgacacccgt	ggcactgtgt	atgtgggttac	catgtgttac	1020
307	cccaagggaa	gtctgtctgt	cattggggac	gtatgggttc	catcagccctt	caccactgc	1080
309	cacgcgttgc	ggccatgttgc	aaacatccca	catgcacatgt	tgaagttctg	tgaggagggt	1140
311	ttttggaaacgc	ttttggggccaa	ccacatgtatc	ttcccccggcc	tatccatggat	cgaccgttgc	1200
313	aacccctgttgc	caatgtcgat	tttttttttttt	atccatggat	tcttggacac	cgggcacgtt	1260
315	gactgccttc	ttggaccaacc	cggcaacccc	atcccttcgtc	ccgaggatct	gcggggggcc	1320
317	agtcaccc	tgccggccaa	gtgcggatgc	gttttttttttt	tgggtctccaa	ggccctgtct	1380
319	tatcatgcgt	atgcgttgc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1440
321	cagacccgc	acttccctgt	ggccgtatggc	accagctgt	gcggggccaa	gttctgcctc	1500
323	aaatggggct	ttgttggatgc	acacaaaccc	aaacaacaca	gggttggatgg	tttcttggcc	1560
325	aaatgggttac	cttgcgttgc	tttttttttttt	atcgatgttgc	ggggcgttgc	gttgcgcacgg	1620
327	aggcagtgtca	ccaaacccccc	ccatgtccaaac	ggggggcaatg	actgcgagggg	agttaggggt	1680
329	aaatccatgt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1740
331	gaggaggatc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1800
333	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1860
335	cgacggatca	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1920
337	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	1980
339	ggggaaatccgg	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2040
341	agctgcgttgc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2100
343	ggccatccccc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2160
345	ggggatgttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2220
347	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2280
349	ggcacccggca	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2340
351	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2400
353	cccaaaaggatc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2460
355	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2520
357	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2580
359	aaatggggcc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2640
361	ggccatccgc	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2700
363	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2760
365	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2820
367	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	tttttttttttt	2880
370	<210> SEQ ID NO: 3						
371	<211> LENGTH: 50						
372	<212> TYPE: DNA						
373	<213> ORGANISM: Homo sapiens						

RAW SEQUENCE LISTING DATE: 01/14/2002
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Input Set : A:\067541 Sequence Listing.txt
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375 <400> SEQUENCE: 3	50
376 cttagcgcggc cgccaggatcc gactacaagg acgacgatga caaatgataa	
379 <210> SEQ ID NO: 4	
380 <211> LENGTH: 50	
381 <212> TYPE: DNA	
382 <213> ORGANISM: Homo sapiens	
384 <400> SEQUENCE: 4	
385 gatcttatac ttgtcatacg tcgtccttgc agtccggatcc tgccggcccg	50
388 <210> SEQ ID NO: 5	
389 <211> LENGTH: 34	
390 <212> TYPE: DNA	
391 <213> ORGANISM: Homo sapiens	
393 <400> SEQUENCE: 5	
394 ggactatgtc agaagctggg taccagctgc tagc	34
397 <210> SEQ ID NO: 6	
398 <211> LENGTH: 29	
399 <212> TYPE: DNA	
400 <213> ORGANISM: Homo sapiens	
402 <400> SEQUENCE: 6	
403 ggactatgtc cgaccggatca tggctgcgc	29
406 <210> SEQ ID NO: 7	
407 <211> LENGTH: 42	
408 <212> TYPE: DNA	
409 <213> ORGANISM: Homo sapiens	
411 <400> SEQUENCE: 7	
412 gtgtcttagag ccatgtctttt gctgggcato ctaaccctgg ct	42
415 <210> SEQ ID NO: 8	
416 <211> LENGTH: 41	
417 <212> TYPE: DNA	
418 <213> ORGANISM: Homo sapiens	
420 <400> SEQUENCE: 8	
421 agagcggccg cctgtctcc tcggaaagtc ttccggagg c	41
424 <210> SEQ ID NO: 9	
425 <211> LENGTH: 27	
426 <212> TYPE: DNA	
427 <213> ORGANISM: Homo sapiens	
429 <400> SEQUENCE: 9	
430 aagcacaggg tggatgggtc ctgggcc	27
433 <210> SEQ ID NO: 10	
434 <211> LENGTH: 37	
435 <212> TYPE: DNA	
436 <213> ORGANISM: Homo sapiens	
438 <400> SEQUENCE: 10	
439 ggcgcggccgc gcacggccctc aggacgcaga agtccag	37
442 <210> SEQ ID NO: 11	
443 <211> LENGTH: 37	
444 <212> TYPE: DNA	
445 <213> ORGANISM: Homo sapiens	
447 <400> SEQUENCE: 11	

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/009,332

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Input Set : A:\Q67541 Sequence Listing.txt
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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date